QUALITY ASSURANCE
(ATT#8_LGA12_SantaRosa_QA_1of1)

The purpose of the QA/QC program is to ensure that the highest quality work products are developed and provided to the City. The project management approach will also ensure the work products are completed on schedule and within budget and that the work products are of high quality and consistent with the standards of care in the industry for this type of project.

Professional and Efficient Staff Resource Allocation & Workload Coordination

The Project Team consists of very experienced and appropriately licensed professionals; including but not limited to: Senior City Water Resource Managers, Supervising Engineers, Deputy Director of Utilities, CA Professional Engineers, CA Groundwater Professionals and CA Professional Geologists, licensed C-57 CA Drilling Contractor and DPH accredited laboratory. Each team member will be performing functions on this project consistent with their technical expertise and long history of performing very similar work efforts for numerous projects of similar scope and complexity in geologic environments very similar to that which will be encountered in the Santa Rosa area. For example, these groundwater professionals have been working and directing the test boring and nested monitoring well installation work of C-57 Drilling contractors throughout California and beyond for numerous years. This includes the evaluation and identification of potential drilling sites, securing environmental clearances, developing borehole specific details for the construction of the nested monitoring wells including location of monitoring well blank and screen zones, gravel pack specifications and seal zones. These professionals are also very accomplished at evaluating the field data and water quality analytical results. The CA Professional Geologist is equally qualified and very experienced at reviewing and evaluating the cutting samples collected from the test boreholes and identifying aquifer zones and confining layers. Standards of care consistent with conducting this type of work will be observed and adhered to with respect to health and safety during the drilling and field operations portion of this work effort, soil and groundwater sampling protocols, containment of generated water and other residuals from the drilling and monitoring well construction, development and sampling activities, and laboratory protocols for blank and field sampling.

The scheduling and coordination of these professionals will be done by City senior managers, and this team has done considerable work together in the past and is currently engaged in similar groundwater work activities at this time. To assist in the coordination and communications, monthly project status meetings and/or conference calls will be held. The focus of these meetings/conference calls is to review and discuss as a group, the work that has been done to date, to discuss next work tasks, and discuss and resolve any issues that have developed, as well as to make sure that we are meeting project goals and deadlines. This communication allows for the flexible reallocation of staff resources as needed.

Method for In-House Review of Work Products

While the Team's Project Manager (PM) will provide written direction to the team describing detailed methodology for completing each of the subtasks in this scope, there will be a separate, independent individual who will be responsible for the quality assurance and quality control (QA/QC) of project work products. This individual will be responsible for all QA/QC for this project. All meeting agendas, meeting notes, maps, and technical memos generated under this contract will be reviewed internally by both the PM and QA/QC lead, and all review comments will be addressed to the satisfaction of our QA/QC lead before delivery.

Monitoring Well Sampling

The monitoring wells will be sampled by trained City personnel following the City's Laguna Environmental Laboratory Standard Operating Procedure entitled "Low Flow Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells, Revision 2" dated June 2012. Laboratory analysis will be conducted by trained City personnel following applicable Environmental Protection Agency Standard Methods.